



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,802	12/12/2003	Russell Smith	006242.00046	8820
22907	7590	12/02/2005	EXAMINER	
BANNER & WITCOFF				RUDDOCK, ULA CORINNA
1001 G STREET N W				ART UNIT
SUITE 1100				PAPER NUMBER
WASHINGTON, DC 20001				1771

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/733,802	SMITH, RUSSELL	
	Examiner Ula C. Ruddock	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 14 September 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 14 and 15 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-13 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

### **DETAILED ACTION**

1. The Examiner has carefully considered Applicant's response filed September 14, 2005. The secondary reference of Sugimoto et al. (US 4,514,471) has been withdrawn. However, the rejections have been maintained.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Election/Restrictions***

3. Newly submitted claims 14 and 15 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: these newly added claims are drawn the method of making a gypsum panel and therefore, constitute a distinct invention from the original claims drawn to a gypsum panel.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 14 and 15 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

#### ***Claim Rejections - 35 USC § 103***

4. Claims 1, 2, and 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colbert (US 2004/0154264) in view of Takahashi et al. (US 2003/0113520). Colbert discloses a coated gypsum board product comprising a gypsum core and facing sheets (abstract). The board can be coated with paper on both sides thereof [0012]. In some applications, the facing sheet is a paper blended with mineral or synthetic fibers [0067]. The coating contains calcium carbonate,

fillers, latex emulsions, and perlite filler [0015]. A silicone derivative is added as a hydrophobic agent [0035]. It should be noted that the Examiner is equating the calcium carbonate and perlite filler of Colbert to be the same as Applicant's fillers and the latex emulsion of Colbert to be the same as Applicant's binder. UV radiation resistance is obtained by exposing the overall surfaces to UV wavelengths [0039]. Colbert discloses the claimed invention except for the teaching that the coating is a radiation curable coating formulation.

Takahashi et al. (US 2003/0113520) disclose a decorative material comprising a substrate and a protective layer that comprises an ionizing radiation-cured resin (abstract). The substrate can be a gypsum board or a glass fiber nonwoven fabric or other various fabric substrates [0105]. It would have been obvious to have used the radiation cured coating of Takahashi et al. as the coating on the gypsum board product of Colbert, motivated by the desire to create a product having high surface hardness, excellent adhesive properties, and increased weathering properties.

***Regarding Applicant's newly added amendments, it is the Examiner's position that "cured in place" is a method step. It should be noted that the method of forming an article is not germane to the issue of patentability of the article itself. Therefore, this limitation has not been given patentable weight. Finally, the burden has been shifted to Applicant to show the unobvious differences between the claimed product and the prior art product.***

***With regard to the limitation that the gypsum "partially penetrates into the fibrous facing material, because Colbert does not disclose any layer between the gypsum substrate and the paper facings, the gypsum material has to penetrate the fibrous facings to a degree in order to form a bond between the two layers.***

***Finally, Applicant presently claims an aggregate material. Colbert also discloses an aggregate material comprising perlite, which is one of the aggregates disclosed by Applicant at paragraph [105].***

***Rejection is maintained.***

5. Claims 3-6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colbert (US 2004/0154264) and Takahashi et al. (US 2003/0113520), as applied to claim 1 above, and further in view of Randall et al. (US 2003/0203191). Colbert and Takahashi et al. disclose the claimed invention except for the teaching that the facing material is a non-woven mat of glass fibers or synthetic fibers or a blend of synthetic and mineral fibers. Colbert and Takahashi et al. also fail to disclose that a water-resistant additive is added to the gypsum core.

Randall et al. (US 2003/0203191) discloses a mat-faced gypsum board comprising a set gypsum core sandwiched between and faced with mats of glass fibers (abstract). The fibrous mat comprises material that is capable of forming a strong bond with the set gypsum comprising the core of the gypsum board. Examples of such material include a mineral-type material such as glass fibers and synthetic resin fibers. The mat can be woven or nonwoven in form [0038]. The core of the gypsum board also preferably includes a water-resistant additive [0023], such as siliconates, wax emulsions, or organopolysiloxane [0033] and [0035]. It would have been obvious to have used the glass and synthetic facer material of Randall et al. as the facers in the product of Colbert and Takahashi et al., motivated by the desire to create a product having decreased delamination and increased strength. It also would have been obvious to have used the water

resistant additive of Randall on the gypsum core of Colbert and Takahashi et al., motivated by the desire to create a gypsum product having increased water resistance.

***Rejection is maintained.***

***Response to Arguments***

6. Applicant's arguments filed September 14, 2005, have been fully considered but they are not persuasive for the reasons set forth. Applicant argues the combination of the Colbert and Takahashi et al. reference. This argument is not persuasive because both references are drawn to gypsum board substrates and therefore, are properly combinable. Applicant also argues that the prior art fails to disclose that the coating is cured in place. This argument is not persuasive because as set forth above, this limitation is a method step and method steps in product claims are not given patentable weight. Furthermore, no difference is seen in the final product when a product is cured in place or cured in a separate processing step. Applicant also argues that the bond between the decorative sheet and the substrate in Takahashi is due to the use of an adhesive, whereas the present claims do not require the use of an adhesive. This argument is not commensurate in scope with the claims because the claims, as presently written, do not preclude the use of an adhesive. Furthermore, the Examiner is not using Takahashi's disclosure of an adhesive in the rejection, but is only using Takahashi for its disclosure of a radiation cured resin. Therefore, the rejections have been maintained.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C. Ruddock whose telephone number is 571-272-1481. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

UCR UCR

*Ula Ruddock*  
**Ula C. Ruddock**  
Primary Examiner  
Tech Center 1700